

# Astrea 7 Pte. Ltd.

## **Capital Structure**

Class	Rating	Outlook	Amount (Mil.) Currency		Legal Final Maturity	Approximate % of NAV	Approximate Cumulative LTV (%)
	rtating	Gutiook	(initial) Carrency	11410 (70)	1-lacality	70 0111111	211 (70)
A-1	A+sf	Stable	526° SGD	4.125	May 2032	19.9	19.9
A-2	Asf	Stable	175 USD	5.350	May 2032	9.2	29.1
В	BBB+sf	Stable	200 USD	6.000	May 2032	10.5	39.6
Equity	N.A.	N.A.	1,150 <sup>b</sup> USD	N.A.	N.A.	60.4	N.A.

LTV – Loan to value. N.A. – Not applicable at launch. <sup>a</sup>Class A-1 principal is equal to USD380 million, based on a USD:SGD exchange rate of 1.385 as of May 18, 2022. <sup>b</sup>Equity value reflects the remaining portfolio NAV and does not include the issuer's net working capital and capitalized transaction costs as of Nov. 30, 2021, estimated to be approximately USD29 million. The equity value, including net working capital and capitalized transaction costs, is approximately USD1,179 million.

Fitch Ratings has assigned ratings to the class A-1, A-2 and B bonds issued by Astrea 7 Pte. Ltd. (Astrea 7, or the issuer) as seen in the table above. Astrea 7 is a private equity (PE) collateralized fund obligation (CFO) backed by interests in a diversified pool of alternative investment funds, with approximately USD1.9 billion in net asset value (NAV) and USD250 million of unfunded capital commitments as of Nov. 30, 2021. Astrea 7 holds all the limited partnership interests of AsterSeven Assets I (AsterSeven, or the AssetCo), a Singapore-based company, which holds the fund interests.

The investment manager of the transaction is Azalea Investment Management Pte. Ltd. (Azalea, or the manager), an indirect, wholly-owned subsidiary of Temasek Holdings (Private) Limited (Temasek). The sponsor is Astrea Capital 7 Pte. Ltd., which is owned by an Azalea affiliate and, ultimately, Temasek.

The underlying funds will distribute cash as they generate income or exit investments, and will make capital calls when they require additional cash to invest. Cash flows generated by the funds will be used to pay off the bonds, as well as pay interest and expenses.

# **Key Rating Drivers**

**Loan to Value:** The cumulative loan to value (LTV) to the NAV at issuance of class A-1, A-2 and B bonds, as noted in the table above, provides a sufficient level of credit enhancement (CE) at the indicated rating levels. An LTV test will redirect cash flows to de-lever the transaction at a constant 50% threshold during the transaction's life.

Stressed Cash Flow Analysis: Fitch measured the ability of the structure to withstand weak performance in the underlying funds in combination with adverse market cycles. Class A-1 and A-2 bonds were able to withstand fourth-quartile-level performance in the underlying funds under all of Fitch's ratings scenarios, indicating 'Asf' category stress. Class B bonds were able to withstand third-quartile-level performance in the underlying funds under all of Fitch's ratings scenarios, indicating 'BBBsf' category stress.

**Liquidity:** The transaction's liquidity position is adequate, and is expected to improve further as the portfolio continues to season. In recent quarters, the portfolio started generating positive net cash flows, and the transaction's liquidity position is also supported by a contingent liquidity facility (USD255 million at launch). Fitch's estimated one-year pro forma liquidity coverage ratio for the transaction is 2.9x.

# **Fund & Asset Managers**

PE CFOs Singapore

**Inside This Report** Page **Key Rating Drivers** 1 2 Rating Notching and Outlook Structure Overview 3 4 Portfolio Overview Structural Features 7 Cash Flow Scenario Analysis 12 15 Valuations Liquidity Analysis 16 The Manager 17 Alignment of Interests 17 Security and Bankruptcy Remoteness 17 The Model 18 Surveillance of Transaction 18 **Rating Sensitivities** 18 Rating Assumptions Sensitivities 19 Criteria Application and Data Adequacy 20 Appendix 1: Portfolio Composition 21

Ratings are not a recommendation to buy, sell or hold any security. The prospectus and other material should be reviewed prior to any purchase.

Appendix 2: Terms of Bonds

#### **Analysts**

#### FAM

Peter Gargiulo +1 212 612-7762

peter.gargiulo@fitchratings.com

Kimberly Green

+1 646 582-4042

kimberly.green@fitchratings.com

Domenic Bussanich

+1 646 582-4874

domenic.bussanich@fitchratings.com

Greg Fayvilevich

+1212908-9151

greg.fayvilevich@fitchratings.com

Structured Credit

Laurent Chane-Kon

+1646582-3752

laurent.chane-kon@fitchratings.com

New Issue | May 27, 2022 fitchratings.com





**Portfolio Composition:** The portfolio of alternative investment fund interests is diversified by vintage, geography, manager, fund, underlying holdings and sector. As of Nov. 30, 2021, the portfolio consisted of 38 funds with strong past performance, managed by 29 primarily large and well-established fund managers. Approximately 27% of the portfolio NAV relate to EUR-denominated funds, of which approximately 65% is hedged.

Transaction Manager and Sponsor: Fitch believes that Azalea has the capabilities and resources required to manage this transaction. Azalea's management team has extensive experience in and institutional knowledge of the PE industry, in addition to experience structuring previous PE CFO transactions. The sponsor and bondholders' interests are strongly aligned, as the sponsor holds the entire equity stake (approximately 60% of NAV) in Astrea 7. During the market volatility in 2020, the sponsor took voluntary actions beyond what was required by transaction documentation of two existing Astrea deals to support senior bonds. Fitch's ratings do not rely on any such future support, but the historical track record is viewed as incrementally positive.

**Counterparties:** Certain structural features of the transaction involve reliance on counterparties, such as the credit facility provider, account banks and hedge counterparties, and the rating on the bonds could be negatively affected in the event of a key counterparty downgrade. Fitch believes this risk is mitigated by counterparty replacement provisions in the transaction documents that align with Fitch's criteria.

Ratings Linked to Eligible Investments: Moneys in reserves accounts for the benefit of class A-1, A-2 and B bonds will be invested in securities or bank deposits, as specified in transaction documentation. As these investments can have long-dated maturities and could have a material impact on the performance of the rated bonds, ratings of the Astrea 7 A-1, A-2 and B bonds will be capped at and linked to the ratings of investments in the reserves accounts.

If investments in the reserves accounts are downgraded below the rating levels of class A-1, A-2 and B bonds at a future date, a corresponding downgrade to the ratings of class A-1, A-2 and B bonds could occur, absent mitigating actions. At launch, these investments are to be rated at the same level or higher than the ratings of class A-1, A-2 and B bonds, and therefore, do not constrain the ratings of the bonds.

**Asset Isolation and Legal Structure:** Legal opinions reviewed by Fitch indicate the issuer is structured as a special-purpose, bankruptcy-remote entity. The issuer has 100% of the member interests in the AssetCo, and the assets held by the AssetCo were transferred to it as a true sale.

Rating Cap at 'A+sf': Fitch has a rating cap at 'A+sf' for PE CFO transactions, driven by the less proven nature of the PE CFO asset class relative to other structured finance asset classes, the uncertainty related to investment performance and the timing of cash flows, the variability of asset valuations and lags in performance reporting.

# **Rating Notching and Outlook**

The class A-1 bond rating of 'A+sf' is one notch above the model-implied 'Asf' rating, and the class B bond rating of 'BBB+sf' is one notch above the model-implied 'BBBsf' rating. The rating uplift from the model-implied ratings for both bonds reflects a high-quality portfolio comprising primarily funds managed by large and well-established general partners (GPs), funds that have exhibited good performance to date, portfolio diversification across multiple metrics, a focus on relatively strong sectors, improving cash flow generation, sufficient liquidity, consistently strong modeling results through Fitch stress scenarios, and a high-quality sponsor that exhibited its willingness to provide voluntary support to the bonds of previous deals. Both bonds' LTV is relatively low compared to that of other PE CFO obligations rated in the same category.

#### Applicable Criteria

Private Equity Collateralized Fund Obligations (PE CFO) Rating Criteria (December 2020)

Global Structured Finance Rating Criteria (October 2021)

Structured Finance and Covered Bonds Counterparty Rating Criteria (November 2021)

Structured Finance and Covered Bonds Counterparty Rating Criteria: Derivative Addendum (November 2021)

Structured Finance and Covered Bonds Interest Rate Stresses Rating Criteria (September 2021)

Covered Bonds Rating Criteria (June 2021)

#### Related Research

PE CFO Update: May 2022 (May 2022)

PE CFOs Stable After Coronavirus Recovery (November 2021)

PE CFOs: Securitizing Private Equity Fund Interests (October 2019)

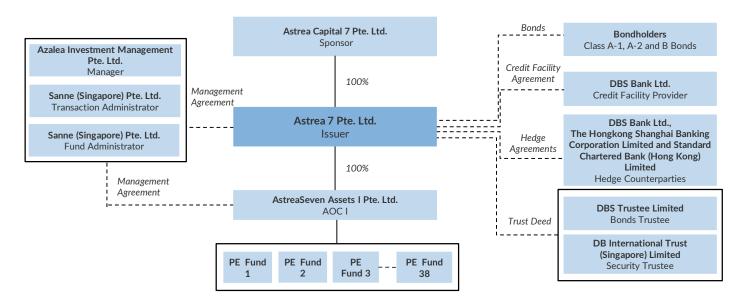


## **Structure Overview**

The issuer is structured as a special-purpose entity that is the sole equity holder of the AssetCo. The issuer's capitalization will include class A-1, A-2 and B bonds, as well as an equity tranche. The net cash received by the issuer via the issuance of the bonds will be used by the issuer to repay a certain portion of existing loans from the sponsor, which were incurred in connection with the AssetCo's acquisition of the fund investments.

The AssetCo holds the fund investments as a limited partner (LP) for each of the underlying interests. The AssetCo will transfer cash distributions from the fund investments to the issuer, which will apply the distributions semiannually in accordance with the priority of payments.

#### Structure Diagram



Source: Fitch Ratings, Astrea 7 Pte. Ltd.

Role	Name	Rating
Issuer	Astrea 7 Pte. Ltd.	NR
Sponsor	Astrea Capital 7 Pte. Ltd.	NR
Transaction Manager	Azalea Investment Management Pte. Ltd.	NR
Fund and Transaction Administrator	Sanne (Singapore) Pte. Ltd.	NR
Accounts Bank	DBS Bank Ltd.	AA-/F1
Credit Facility Provider	DBS Bank Ltd.	AA-/F1-
Foreign Exchange Hedge Provider	DBS Bank Ltd.	AA-/F1-
	The Hongkong and Shanghai Corporation Limited	AA-/F1-
	Standard Chartered Bank (Hong Kong) Limited	A+/F1



### **Portfolio Overview**

The funds were acquired by the sponsor from its affiliates for the PE CFO transaction. Of funds in the Astrea 7 portfolio, 23% consist of the same funds as in the Astrea VI portfolio, as weighted by NAV. This is lower than the 81% overlap of the Astrea VI portfolio at launch relative to the Astrea V portfolio. However, 42% of the Astrea 7 portfolio consist of subsequent fund iterations (series) of those in the Astrea VI portfolio. The portfolio is expected to be static.

Reinvestments in new funds are not permitted after the transaction closes, while selling fund interests is allowed, as described below, but is not expected under normal circumstances.

The portfolio consists of buyout and growth funds, and is diversified across vintages, regions, managers, funds, underlying holdings and sectors, as seen on the tables below and at the right. The top sectors, information technology and healthcare, as shown on the table at the right, showed resiliency during the 2020 downturn.

#### **Portfolio Stratification**

(% of Total Exposure, As of Nov. 30, 2021)

(70 01 1 0 tal. 2)(p0	0 41 0,7 10 01 1 10 11	00,2022,					
	Three Years Old	Four Years Old	Five Years Old	Six Years Old	Seven Years Old	Eight Years Old	
Fund Strategy and Age	(2019 Vintage)	(2018 Vintage)	(2017 Vintage)	(2016 Vintage)	(2015 Vintage)	(2014 Vintage)	Total
Buyout	4	24	23	15	8	5	79
Growth	3	2	5	5	6	0	21
Total	7	26	28	20	14	5	100

Note: The strategy classifications above are based on Fitch's assessment, and may differ from the classifications in the transaction's offering documents. Fitch classified strategies based on funds' stated objectives, holdings, cash flow profiles, and third party and the transaction sponsor's classifications.

Source: Fitch Ratings.

The funds on average are less seasoned than in previous Astrea transactions, but in line with PE CFOs overall, as shown in the Transaction Comparison – At Launch table below, based on weighted average (WA) age and remaining unfunded capital commitments. The portfolio has been net cash flow positive, and the age of the portfolio's funds and historical data suggest future distributions will generally continue to outstrip contributions.

The portfolio consists of U.S., European and Asian funds, managed primarily by large GPs with established track records. Fitch reviewed each fund and GP in the portfolio using quantitative and qualitative metrics, including reviewing the GP's history, resources, capital-raising success, and previous fund performance based on information available publicly, from third-party data providers and from the sponsor.

Overall, the funds in the portfolio have exhibited good performance. As shown in the charts below, the GPs in the Astrea 7 portfolio tend to be very large, with extensive experience and success raising capital in recent years, which indicates investors' confidence. The funds also tend to be large, and most are subsequent iterations of established strategies. Based on this review of the funds and GPs, Fitch determined that no performance-based haircuts were required beyond the base case scenario analysis in accordance with Fitch's rating criteria.

The full portfolio is included in the Appendix section.

# Underlying Investment Sector Breakdown

(As of Nov. 30, 2021)	(% of NAV)
Information Technology	34
Healthcare	19
Consumer Discretionary	12
Industrials	11
Financials	7
Communication Services	7
Consumer Staples	4
Real Estate	3
Materials	2
Energy	1
Remaining Sectors	0
Source: Astrea 7 Pte. Ltd.	

# Underlying Portfolio Company Breakdown

(As of Nov. 30, 2021)	(% of NAV)
Top Holding	1.5
Second Holding	1.1
Third Holding	1.0
Top Five Holdings	5.4
Top 10 Holdings	9.3
Top 20 Holdings	15.4
Source: Astrea 7 Pte. Ltd.	

#### **Top 10 General Partners**

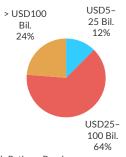
-	
(As of Nov. 30, 2021)	(% of Total Exposure)
Warburg Pincus	8.1
KKR	6.8
Permira	6.2
Thoma Bravo	5.7
Vista Equity Partners	5.5
EQT Partners	5.3
TPG	4.8
CVC Capital Partners	4.4
Advent International	4.0
Apax Partners	3.0
Total	53.7
Source: Astrea 7 Pte. Ltd.	

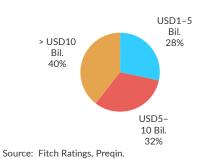


# Portfolio Funds' Exposure by GP AUM Portfolio Funds' Exposure by Fund Size

(As of Nov. 30, 2021)

(As of Nov. 30, 2021)





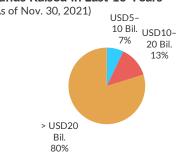
Source: Fitch Ratings, Preqin.

Portfolio Funds' Exposure by GP

Track Record (As of Nov. 30, 2021)



Portfolio Funds' Exposure by GP's Funds Raised in Last 10 Years (As of Nov. 30, 2021)

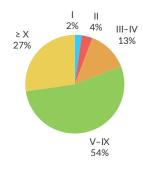


Source: Fitch Ratings, Preqin.

Source: Fitch Ratings, Preqin.

# Portfolio Funds' Exposure by Number in Fund Series

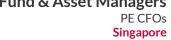
(As of Nov. 30, 2021)



Source: Fitch Ratings, Preqin.

		_	•		
Iranc	action	( )	mparison	\	Launch
1 1 4115	action	CUI	HUAI ISUL	1 — AL	Launch

Name	Astrea 7 Pte. Ltd.	Astrea VI Pte. Ltd.	MCA Fund III Holding LLC	Nassau 2019 CFO LLC	Astrea V Pte. Ltd.	SWC Funding LLC	Astrea IV Pte. Ltd.	Astrea III Pte. Ltd.
Sponsor Type	GovLinked	GovLinked	Insurance	Insurance	GovLinked	Asset Manager	GovLinked	GovLinked
Closing Date	May 2022	March 2021	October 2020	September 2019	June 2019	August 2018	June 2018	June 2016
Total Debt Issuance (USD Mil.)	755	643	402	263	600	216	501	510
Debt Legal Final Maturities (Years)  Capital Structure (Class LTV % a	10	10 TV%)	15	15	10	15	10	10
A+sf	19.9 (19.9)	19.6 (19.6)	_	_	_	_	_	_
Asf	9.2 (29.1)	15.7 (35.3)	40.0 (40.0)	50.0 (50.0)	34.8 (34.8)	50.0 (50.0)	35.6 (35.6)	29.8 (29.8)
BBB+sf	10.5 (39.6)	_	_	_	_	_	_	_
BBBsf	_	8.9 (44.2)	17.5 (57.5)	_	10.5 (45.3)	_	10.0 (45.6)	8.8 (38.5)
BBsf	_	_	12.5 (70.0)	20.0 (70.0)	_	_	_	_



Name	Astrea 7 Pte. Ltd.	Astrea VI Pte. Ltd.	MCA Fund III Holding LLC	Nassau 2019 CFO LLC	Astrea V Pte. Ltd.	SWC Funding LLC	Astrea IV Pte. Ltd.	Astrea III Pte. Ltd.
Unrated Debt	_	_	_	_	_	_	_	6.1 (44.7)
Equity	60.4	55.8	30.0	30.0	54.7	50.0	54.4	55.3
Portfolio								
Collateral NAV (USD Mil.)	1,905	1,456	575	376	1,324	432	1,098	1,142
Unfunded Commitment (USD Mil.)	250	156	190	79	215	84	168	201
Total Exposure (USD Mil.)	2,155	1,612	764	455	1,539	516	1,267	1,343
Total Commitments (USD Mil.)	1,480	1,358	791	741	1,376	465	1,753	1,557
Unfunded (as % of Total Commitments)	17	11	24	11	16	18	10	13
Unfunded (as % of Total Exposure)	12	10	25	17	14	16	13	15
Unfunded (as % of NAV)	13	11	33	21	16	19	15	18
Weighted Average Fund Age (by Total Exposure)	5	7	4	6	5	5	7	7
No. of Funds	38	35	66	109	38	32	36	34
No. of Co-Investments	N.A.	N.A.	5	N.A.	N.A.	7	N.A.	N.A.
No. of Managers	29	28	57	69	32	19	27	26
No. of Portfolio Holdings	982	802	1,336	1,273	862	244	596	592
Allowed to Reinvest	No	No	No	No	No	Yes (2-Year Period)	No	No
Allowed to Sell Investments (Up to % of NAV)	Yes (15%)	Yes (15%)	Yes (35%)	Yes (35%)	Yes (15%)	Yes (35%)	Yes (10%)	No
Largest Fund Strategy (% of Total Exposure)	Buyout (79%)	Buyout (83%)	Buyout (27%)	Buyout (43%)	Buyout (82%)	Natural Resources — Excluding Oil & Gas (51%)	Buyout (87%)	Buyout (77%)
Second Largest Fund Strategy (% of Total Exposure)	Growth (21%)	Growth (17%)	Mezzanine (20%)	Mezzanine (41%)	Growth (18%)	Natural Resources — Oil & Gas (22%)	Growth (11%)	Growth (23%)
Third Largest Fund Strategy (% of Total Exposure)	_	_	Secondaries (12%)	Venture Capital (14%)	-	Venture Capital (11%)	Private Debt (2%)	_
USD Exposure (as % of NAV)	73	80	100	100	82	100	81	88
Fund Domicile: North America (as % of NAV)	55	61	93	100	56	42	63	67
Fund Domicile: Europe (as % of NAV)	27	23	5	0	22	10	19	12
Fund Domicile: APAC (as % of	21		<u> </u>	0	22	10	17	12
NAV)	18	16	2	0	22	13	18	21
Contingent Liquidity	Liquidity facility to cover expenses, interest and capital calls. Facility is sized in two parts: (A) starts at USD130 Mil. and steps down; and (B) is sized to 50% of unfunded. Initial size is USD255 Mil.	Liquidity facility to cover expenses, interest and capital calls. Facility is sized in two parts: (A) starts at USD130 Mil. and steps down; and (B) is sized to 50% of unfunded. Initial size is USD208 Mil.	CMFG is contractually obligated to fund 100% of capital calls. Funds will be reserved to cover one distribution period's interest on class A and B notes, to be funded from clause 5 of the priority of payments. Interest on all note classes is deferrable.	interest and capital calls. The facility is sized to one year of expenses and	Liquidity facility to cover expenses, interest and capital calls. Facility is sized in two parts: (A) starts at USD130 Mil. and steps down; and (B) is sized to 50% of unfunded. Initial size is USD238 Mil.	Liquidity facility is available to cover expenses, interest and capital calls. The facility is sized to one year of class A interest plus 50% of unfunded. Initial size is USD50 Mil. Also option to require sponsor to cover capital calls.	Two separate facilities; capital call facility sized to cover the entire unfunded amount of the portfolio. Liquidity facility to cover interest and expenses, initially sized at USD100 Mil.	Prefunded reserves accounts to cover the entir unfunded amount of the portfolio. Liquidity facilit to cover interests and expenses, initially sized a USD90 Mil.

**Fitch**Ratings



# **Structural Features**

Class A-1 and class A-2 bonds have a scheduled call date of five years, and class B bonds have a scheduled call date of six years. However, all classes of bonds issued have longer legal maturities of 10 years, which could be supportive in weathering a potential market downturn. Fitch's ratings address the timely repayment of the bonds at their legal final maturities, not the potential repayment at the earlier scheduled call dates. Capital calls will be funded primarily by distributions from the underlying portfolio.

Class A and B reserves accounts will sequentially retain cash distributions for the repayment of class A and B bonds until the scheduled call date or the distribution date at which the class A or B reserves accounts cap is met. Class B bonds do not begin reserving until class A bonds are paid-in-full, or are fully reserved. The structure also has a credit facility sized to 50% of the amount of unfunded commitments to the underlying funds plus an amount that steps down to cover operating expenses and interest on the bonds. These features help mitigate the cyclicality of PE funds that Fitch considered in its analysis.

#### **Class A Reserves Accounts**

The principal amount of class A-1 and A-2 bonds is to be reserved over the bonds' expected call dates and funded as provided in the priority of payments. Payments to class A reserves accounts will be made on semiannual distribution dates to provide sufficient funds to fully repay both the class A-1 and A-2 bonds at year five, per the table below.

If available cash on any distribution date is insufficient to satisfy the reserve amount, the unpaid balance carries forward to subsequent distribution dates until paid through the priority of payments. Amounts transferred to the reserves accounts are capped (the reserves accounts cap) at the combined principal amount of class A-1 and A-2 bonds.

## Scheduled Call Date Scenarios for Class A Bonds

Balance of Reserves Account at the Scheduled Call Date	Class A-1 Bonds Status	Class A-2 Bonds Status
Less than the principal amount of class A-1 bonds	Not Redeemed	Not Redeemed
Greater than or equal to the principal of class A-1 bonds but less than the aggregate principal amount of class A-1		
and A-2 bonds	Redeemed	Partially Redeemed
Greater than or equal to the aggregate principal amount of		
class A-1 and A-2 bonds	Redeemed	Redeemed

Source: Astrea 7 Pte. Ltd.

If at end of year five on the scheduled call date of class A-1 and A-2 bonds the total balance of the reserves accounts and reserves custody account is at least equal to the principal of class A-1 bonds and there is no balance drawn on the credit facility, then class A-1 bonds will be fully redeemed with the remaining balance used to redeem part or all of the principal amount of class A-2 bonds on the same date as the redemption of class A-1 bonds. Any remaining outstanding class A-2 bonds will be redeemed on subsequent distribution dates using available cash flows.

In a transaction default scenario, class A-1 and A-2 bonds have equal claim on moneys in the reserves accounts. Outside of a default scenario, under expected case scenarios and some stress scenarios, class A-1 and A-2 bonds are likely to be called and paid off at the same time; however, under more stressful conditions, class A-1 bonds may be called and paid off before class A-2 bonds. Fitch believes these dynamics create time subordination between class A-1 and A-2 bonds in periods of stress, and support the notching differentiation between the A-1 and A-2 bonds.

#### Class B Reserves Accounts

Subsequent to the full repayment of class A bonds' principal, or the meeting of the class A reserves account cap, 90% of available cash will be used to reserve the principal amount of class B bonds. Payments to class B reserves accounts will be made on semiannual distribution until funds are sufficient to fully repay the class B bonds, with an expected call date at year six.

#### Reserves Accounts

Distribution Date	Total Class A-1 and A-2 Reserves Amount (USD Mil.)
First	57
Second	57
Third	57
Fourth	57
Fifth	57
Sixth	57
Seventh	57
Eighth	57
Ninth	57
Tenth	57
Total	570

Note: Final amounts are based on FX forwards at close.

Source: Astrea 7 Pte 1 td



#### Coupon Step-Up

If any class of bonds is not redeemed in full on its scheduled call dates, the applicable interest rate is subject to a one-time 100bps per annum step-up, starting from the scheduled call date.

#### Maximum LTV Ratio

The priority of payments provides for the deleveraging of the bonds on any distribution date at which the LTV exceeds 50% (maximum LTV ratio), subject to available funds in the structure. The purpose of this feature is to de-lever the structure to reduce bondholders' exposure to the risk of portfolio valuation declines or the risk of cash flow exiting the structure and rendering the remaining NAV insufficient to provide future distributions to support the bonds. There is no requirement to sell fund interests upon a breach of the LTV ratio.

LTV is calculated as the outstanding balance of the credit facility and the bonds (net of class A and B reserves accounts balances) divided by the portfolio NAV. If LTV exceeds the 50% threshold, 100% of the remaining cash flow after payment of amounts due under clauses 1 through 9 of the priority of payments in the Appendix will be paid in accordance with clause 10. If class A-1 bonds are still outstanding, the cash flow will be used to fund the reserves accounts until the reserves accounts cap is reached, and then to reserve the class B bonds until the maximum LTV ratio is no longer in breach. If class A-1 bonds have been redeemed, the cash flows will be applied to the principal repayment of class A-2 bonds, and then to the class B bonds' reserve until the maximum LTV ratio is no longer in breach.

#### **Credit Facility**

The credit facility is a senior standby multicurrency liquidity facility established with DBS Bank Ltd. (DBS; AA–/F1+/Stable) to fund (i) taxes, administrative expenses, management fees, hedging-related payments and interest on class A-1, A-2 and B bonds (payments due under clauses 1 through 4, except for clause 4 (iii), and clause 5 through 6 of the priority of payments), and (ii) capital calls in the event of a shortfall in distributions in certain payment periods. The credit facility fully matures upon the earlier of the end of year 10 or the date on which all classes of bonds are fully redeemed (termination date).

The amount available under the facility is USD255 million at issuance. The total amount available to draw under the credit facility is sized in two parts, "A" plus "B". Facility "A" will step down in accordance with the table at right, while facility "B" will be sized to 50% of the unfunded capital commitments.

Interest on the amount drawn is paid at a rate of the relevant Secured Overnight Financing Rate (SOFR) plus 1.60% and the relevant credit adjustment spread for the relevant interest period. There is an annual 50-bp commitment fee on the undrawn portion.

Per clause 4 of the priority of payments in the Appendix, any cash in the operating account on any distribution date will be used to pay the credit facility up to the lesser of the outstanding loan balance or the full amount of cash in the operating account. Any loan amount outstanding after this payment is repayable on the next distribution date if there is sufficient cash in the operating account. In any event, the full amount of the loan balance must be repaid by the termination date.

DBS can cancel the commitment or declare the outstanding amount due and payable if there is an event of default (EOD) under the credit facility agreement. Such events include nonpayment of loan principal or interest when due, insolvency or nonpayment of any debt of the issuer and any EOD under the bonds.

The credit facility provider is required to be replaced if the provider's rating falls below the lower of 'A-' and 'F1' or the then prevailing rating of the most senior class of outstanding Astrea 7 bonds (credit facility minimum rating requirement), provided the replacement would not cause a downgrade to the then-prevailing rating of the most senior class of outstanding Astrea 7 bonds. The documents provide that the issuer and lender make "commercially reasonable" efforts to affect the replacement within 30 days. These eligibility thresholds and replacement language are in line with Fitch's "Structured Finance and Covered Bonds Counterparty Rating Criteria." However, Fitch's counterparty criteria report anticipates that credit facilities will be fully drawn if the bank provider's rating falls below the relevant rating thresholds, which in the case of Astrea 7 would be a rating of 'BBB' for the bank provider. Fitch views this difference with

#### Credit Facility Availability

Stepdown Provision	Amount (USD Mil.)
Years 1–3 of the Transaction	130
Years 4-6 of the Transaction	100
Year 7 of the Transaction through the Termination Date	40
Source: Astrea 7 Pte. Ltd.	



the criteria as immaterial since DBS is currently rated higher than the most senior Astrea VI bond, and much higher than the 'BBB' threshold, and Fitch views the deal's reliance on the credit facility as low. If DBS in the future is downgraded below the required rating threshold and is not replaced in a timely fashion, this could have an impact on the Astrea 7 bond ratings.

The amount available under the credit facility for the transaction is slightly larger than for prior Astrea transactions at launch. The amount of liquidity available is sufficient for the projected use of the facility under Fitch's stress scenarios and is in line with other Fitch-rated PE CFOs. The highest level of utilization of the facility was USD63 million under Fitch's 2009 fourth-quartile, capital call increase – 30% sensitivity scenario, representing about 25% of its total capacity at launch and 38% after year 7.

## **Hedging Counterparties**

Full principal and semiannual interest on class A-1 bonds is payable in Singapore dollars (SGD), unlike the other bond classes, which are payable in U.S. dollars. The fund investments are denominated in USD and euros, creating a currency mismatch between Astrea 7's assets and liabilities. These currency mismatches introduce currency risk, for which the issuer will employ hedge agreements to help mitigate foreign-currency (FX) rate volatility that may negatively affect the cash flows needed to fund the required payments under the bonds. These agreements are with DBS Bank Ltd. (DBS; 'AA-/F1+'/Stable), the Hong Kong and Shanghai Banking Corporation Limited (HSBC; 'AA-/F1+'/Negative) and Standard Chartered Bank (Hong Kong) Limited (SCB; 'A+/F1'/Negative).

Fitch notes that clause 12 of the priority of payments is a "flip clause," which places any termination payments due to a hedge counterparty that is in default in a junior position in the transaction's priority of payments. The purpose of this provision is to mitigate the potential impact caused by the default or non-performance of the counterparty. In case the issuer does not pay a hedge counterparty, the transaction documents include a "non-petition" clause that prevents the counterparty from causing the issuer to file for bankruptcy.

A hedge counterparty will be replaced if its rating falls below the lower of 'A-' and 'F1' or the then prevailing rating of the most senior outstanding class of Astrea 7 bonds (hedge counterparty minimum rating requirement), provided the replacement would not cause a downgrade to the then-prevailing rating of the most senior outstanding class of Astrea 7 bonds. The documents provide that the issuer and hedge counterparty make "commercially reasonable" efforts to affect the replacement within 30 days. These eligibility thresholds and replacement language are in line with Fitch's "Structured Finance and Covered Bonds Counterparty Rating Criteria."

#### Class A-1 Bonds - Principal Amounts Hedge

To mitigate class A-1 bonds' FX mismatch risk, the issuer will enter into forward contracts to buy SGDs and sell USDs to hedge 100% of the principal amount of class A-1 bonds.

The issuer will take delivery of SGD526 million to fully repay the class A-1 bonds across a series of fixed forwards that will be settled before the scheduled call date. If, for any forward contract, the reserves accounts are funded with less than the amount required to settle the forward contract, the issuer will settle the forward for the amount of U.S. dollars that has been accumulated. For the underfunded USD amount, the issuer has the discretion to roll over the hedge by entering into a six-month or longer FX forward transaction with the counterparty. The forward transaction will result in cash flows to the issuer based on the difference between the initial forward transaction versus the spot rate of the new forward. There would be a net cash inflow if the U.S. dollar has depreciated and a net cash outflow if the U.S. dollar has appreciated since closing.

At the discretion of the issuer, if at year 5.5, the reserves accounts are still not fully funded, the rollover process would be repeated with another six-month FX forward for the underfunded USD amount. The FX forward would expire at the next distribution date, and at the issuer's discretion, the process would repeat until class A-1 bonds are fully repaid.

If the reserves accounts are funded with less than the USD amounts required to settle the hedge, equal to USD391 million, the issuer will be required to make a payment to the counterparty to settle the hedge if the USD appreciated against the SGD compared to the forward rate. However, this



situation is unlikely because, even if the reserves accounts contain only 70% of the scheduled reserves, this would be sufficient to settle the hedge. Under all the adverse scenarios Fitch ran, model results indicate there would be sufficient funds in the reserves accounts to fully settle the hedge for class A-1 bonds.

#### Class A-1 Bonds - Interest Amounts

At closing, the issuer will enter into 10 separate forward contracts with the hedge counterparties in amounts to fully match the 10 semiannual interest payments on class A-1 bonds.

If class A reserves accounts are underfunded and class A-1 bonds are not redeemed at the scheduled call date, the issuer may enter into a six-month forward contract for the interest payment due at year 5.5. If at year 5.5, the reserves accounts are still not fully funded, it will be at the discretion of the issuer to enter into a new six-month forward contract for the interest payment due at the next distribution date and, at the issuer's discretion, continue the process until class A-1 bonds are fully repaid.

#### Euro NAV Hedge

FX risk in the portfolio is viewed as manageable, as the bulk of fund investments provides distributions in USD. Of the 38 funds in the portfolio, 11 funds, totaling about USD523 million of NAV (27% of total NAV), call capital and make distributions in euros. To mitigate FX risk posed by the euro-denominated funds (compared to the USD- and SGD-denominated bonds), the issuer has entered into a series of fixed forward contracts (with fixed forward rates and fixed forward dates), ranging in tenor from six months to six years, to hedge approximately 65% of the initial euro NAV, subject to change before closing. The tenors and notional amounts of euro hedges were set by Azalea to match the manager's projections of euro NAV distributions and are subject to change until closing. This leaves 35% of the initial euro NAV unhedged, approximately USD189 million of NAV (9.9% of total NAV).

As the timing and amounts of distributions from PE funds are uncertain, fully hedging the FX exposure is impossible. Not hedging at all would leave Astrea 7 vulnerable to significant FX exposure, but attempting to hedge 100% of NAV could still leave the structure over-hedged and exposed to FX risk if distributions come in lower than projected and the FX rate moves against the structure when it needs to settle the forwards. Hedging a sufficient portion of the NAV, and providing the manager flexibility to hedge further over time if deemed necessary, is a prudent approach, in Fitch's opinion.

Any underperformance in the euro-denominated funds would create an additional FX risk, as the structure is required to deliver euros for each foreign exchange hedge as they become due. As discussed in the Euro Hedge Stresses section, Fitch conducted stress scenarios to model the sensitivity of the structure to underperformance in European funds and to adverse moves in USD/EUR exchange rates, and the rated bonds passed at their assigned rating levels.

#### **Fund Dispositions**

Astrea 7 at its discretion is allowed to sell stakes in the underlying PE fund interests, up to 15% of the initial portfolio NAV. Proceeds from the sale or disposal of any underlying fund interests will be received in the collection accounts and then swept into the operating accounts.

At each distribution date, net cash proceeds received from a fund disposition will be distributed in accordance with the priority of payments. The portion of fund disposition proceeds remaining after payment of clauses (1) through (6) will be distributed in accordance with clause 7. Clause 7 dictates that any proceeds from fund dispositions will be applied to the reserves accounts of class A-1 and A-2 bonds. Once class A bonds are fully reserved, the proceeds will be applied to reserves accounts of class B bonds. Fitch views positively that fund disposition proceeds will be used to reserve principal as a positive, as it may allow the manager to realize some of the outstanding NAV if organic distributions come in lower and/or slower than needed to pay Astrea 7's liabilities. Selling fund interests on the secondary market in a stressed environment will likely require a steep discount and, in its modeling, Fitch assumed that the fund disposition option was not used.

#### Euro NAV Hedge

No.	Forward Tenor	Euro Hedge Amount (EUR Mil.)
1	0.5 Year	35
2	1 Year	29
3	1.5 Year	29
4	2.0 Year	29
5	2.5 Year	29
6	3.0 Year	29
7	3.5 Year	26
8	4.0 Year	24
9	4.5 Year	22
10	5.0 Year	20
11	5.5 Year	16
12	6.0 Year	14
Source:	Astrea 7 Pte. Ltd.	



# Class A and B Reserves Eligible Investments and Deposits

Eligible investments and deposits held in various accounts within the structure are subject to certain requirements. Funds in the reserves accounts may be placed in security instruments, bank deposits or money market funds in accordance with eligibility requirements defined in transaction documentation. The transaction documentation permits these investments held in reserve to mature as late as the scheduled call date for the respective class of bonds (i.e. five years from transaction launch for class A eligible investments), which significantly exceeded the maturity levels contemplated in Fitch's counterparty criteria for eligible (qualified) investments. Owing to the significant long-dated exposure bondholders may have to investment counterparties, the ratings of Astrea 7 A-1, A-2 and B bonds will be capped at the ratings of investments in the reserves accounts or the ratings allowed for investments in the reserves accounts by the transaction documentation, whichever is lower. Therefore, if a security in the reserves accounts is downgraded in the future below the ratings of class A or B bonds, the ratings of the bonds may also be downgraded, depending on the materiality of the exposure.

The transaction documents specify that class A eligible investments require a rating of at least 'AA—' by Fitch. Bank deposits are required to be invested with banks rated at least 'AA—' by Fitch for amounts covering class A bond principal. The minimum rating requirements are enforced for as long as either tranche of class A bonds are outstanding. As noted, the transaction documents permit these investments to mature at the class A-1 scheduled call date or, if the bonds are not called on the call date, by the next distribution date.

The transaction documents specify that class B eligible investments require a rating of at least 'A+' by Fitch. Similarly, bank deposits are required to be invested with banks rated at least 'A+' by Fitch. The minimum rating requirements are enforced for as long any class B bonds are outstanding. As noted, the transaction documents permit these investments to mature at the class B scheduled call date or, if the bonds are not called on the call date, by the next distribution date.

Eligible investments for both class A and B bond reserves include debt obligations or securities, commercial paper, certificates of deposits or similar types of investments that are consistent with the minimum rating and maturity requirements of the reserved class of bonds. Both the class A and B bond reserves can also include money market funds rated 'AAAmmf' by Fitch.

Since the ratings of the expected eligible investments and bank deposits are at the same level or higher than the ratings of the bonds, capping and linking the ratings of the Astrea 7 bonds to the investments will not affect the bond ratings assigned at launch. However, absent mitigants, in the event of a future downgrade to an investment or deposit institution, Fitch's criteria would require the rating on the Astrea 7 bonds to be capped at the downgraded ratings of the investment or institution if the exposure is deemed material.

#### **Account Bank Providers**

Providers of the various account banks must maintain a rating of at least 'A-' or 'F1' from Fitch so long as any class of bonds is outstanding. Account banks that fall below these rating requirements must be replaced within 60 calendar days. These eligibility thresholds and replacement language are in line with Fitch's "Structured Finance and Covered Bonds Counterparty Rating Criteria."

#### **Transaction Accounts Overview**

Account Name	Owner	Bonds Have Security Interest in the Account(s)?	Account Description
Collection Accounts	AssetCo	Yes, via the daily cash sweep to the operating accounts in an enforcement event/following the daily cash sweep.	These accounts will receive any cash distributions from the funds in the structure or from the operating accounts to fund capital calls.  Cash from these accounts will be used to fund capital calls and will be swept to the operating accounts on a daily basis.
Operating Accounts	Issuer	Yes	Moneys will be swept here on a daily basis from the collection accounts. Any proceeds from credit facility drawdowns will also be deposited to these accounts. Proceeds (in excess of the retained amount) in these accounts will be applied to the priority of payments at each distribution date. Cash in these accounts may be used to satisfy a capital call on the structure.



Transaction Accounts Overview									
Account Name	Owner	Bonds Have Security Interest in the Account(s)?	Account Description						
Operating Custody Accounts	Issuer	Yes	Custody accounts held in the name of the issuer at the transaction's custodian to hold the eligible investments made from funds in the operating accounts. The eligible investments have minimum rating requirements consistent with class A bond reserves' eligible investments, and can mature no later than the next distribution date.						
Class A Reserves Accounts	Issuer	Yes	These accounts will receive funds from the priority of payments to hold for ultimate repayment of principal on class A bonds. In the interim, moneys will be used to fund investments in eligible assets.						
Class B Reserves Accounts	Issuer	Yes	These accounts will receive funds from the priority of payments to hold for ultimate repayment of principal on class B bonds. In the interim, moneys will be used to fund investments in eligible assets.						
Class A Reserves Custody Accounts	Issuer	Yes	Custody accounts used to hold the eligible investments made from funds in class A reserves accounts.						
Class B Reserves Custody Accounts	Issuer	Yes	Custody accounts used to hold the eligible investments made from funds in class B reserves accounts.						
Distributions-in-Kind (DIK) Custody Account	AssetCo	Yes, via liquidation of the DIK on behalf of bondholders, subsequently swept into the operating account in an enforcement event/following the daily cash sweep.	This account will receive any in-kind distributions from the funds in the structure. Funds from this account will be swept to the collection account on a daily basis. This account will only be set up in the future if needed to take in-kind distributions.						
DIK Custody Accounts	Issuer	Yes	Custody account held in the name of the issuer for the safe custody of in-kind distributions received from the portfolio. In-kind distributions may be held here until disposing of the in-kind distributions at a later date, in lieu of disposing the in-kind distributions and depositing the proceeds in the operating account.						

# **Cash Flow Scenario Analysis**

Source: Fitch Ratings, Astrea 7 Pte. Ltd.

As described in Fitch's criteria, when rating PE CFOs, the structure's projected performance and distributions over different market cycles are reviewed to assess whether cash flows are sufficient to pay off the rated obligations based on the transaction's structural features.

The performance scenarios for Astrea 7 were constructed based on historical data that matched the characteristics of Astrea 7's portfolio, primarily the strategies of the funds (buyout and growth) and the ages of the funds. Fitch classified each fund's strategy based on the fund's stated strategy, investments, and historical cash flow curve and Fitch's classifications aligned with the sponsor and third party's classifications in all instances.

Fitch then stressed the resilience of the structure to potential underperformance in Astrea 7's underlying funds. In measuring the results of the scenarios, Fitch focused on key metrics, such as the ability to make timely interest and principal payments with respect to the legal final maturity of the rated bonds, total cash flow as a percentage of the transaction NAV, the repayment periods, the use of distributions in the structure and how various structural protections drove performance of the transaction (LTV triggers, credit facility usage and so on).

The key launch year scenarios Fitch ran are displayed in the tables below.

#### Results

Class A-1 and A-2 bonds were able to withstand fourth-quartile-level performance in the underlying funds under all of Fitch's ratings scenarios, indicating 'Asf' category stress. Class B bonds were able to withstand third-quartile-level performance in the underlying funds under all of Fitch's ratings scenarios, indicating 'BBBsf' category stress. Passing a scenario means that all interest payments were timely, and principal payments were made with respect to the bonds' legal final maturity of 10 years. In all cases, class A-1 bonds were called on the scheduled call date (fifth year). Class A-2 bonds were repaid in year 6.0 under the most punitive scenario. Class B bonds were called by the scheduled call date in 12 out of 17 scenarios, and were repaid in year



7.0 under the most punitive scenario. Under the fourth-quartile performance projections, class B bonds passed 13 out of 17 scenarios.

ī	' مام میبیم ا	V	C	:	C	0	4:1-	Davida	
-	Launcn	rear	Scenar	ios —	Fourth-	-Ouar	THE	Perro	rmance

	Class A	-1	Class A	-2	Class I	В				ributions (%)		
Launch Year Scenario	Payback Period (Years)		Payback Period (Years)		Payback Period (Years)	Max LTV (%)	Distributions and Reserves Interest (%)	Capital Calls Paid (% of Initial NAV)		Class A	Class B	Equity Distributions (% of Initial NAV)
1999	5.00	19	5.50	29	7.00	45	82	11	14	30	10	17
2000	5.00	27	5.50	40	8.00	63	71	8	15	30	10	8
2001	5.00	28	5.00	41	6.50	60	77	7	13	30	10	17
2002	5.00	24	5.00	36	6.50	50	85	6	13	30	10	26
2003	5.00	17	5.00	26	9.00	36	103	7	15	30	10	40
2004	5.00	19	6.00	29	Not Paid	51	107	9	16	30	10	41
2005	5.00	19	5.50	29	8.00	40	109	11	15	30	10	43
2006	5.00	18	5.00	27	7.00	38	118	12	14	30	10	52
2007	5.00	19	5.50	29	7.00	43	93	12	14	30	10	27
2008	5.00	27	6.00	39	8.00	53	76	12	16	30	10	8
2009	5.00	21	5.00	30	6.00	40	94	11	14	30	10	29
2010	5.00	17	5.00	26	6.50	36	89	11	14	30	10	24
2011	5.00	21	5.00	30	7.00	41	79	11	14	30	10	14
2012	5.00	18	5.00	27	7.00	37	86	12	14	30	10	20
2013	5.00	17	5.00	26	Not Paid	36	83	12	16	30	10	15
2014	5.00	18	5.50	27	Not Paid	75	71	12	17	30	7	6
2015	5.00	19	5.50	29	Not Paid	66	70	12	16	30	7	5

Source: Fitch Ratings.

# Launch Year Scenarios — Third-Quartile Performance

	Class A	-1	Class A	-2	Class I	3				Uses of Dis	tributions	
Launch Year Scenario	Payback Period (Years)	Max LTV (%)	Payback Period (Years)	Max LTV (%)	Payback Period (Years)		Distributions and Reserves Interest (%)	Capital Calls Paid (% of Initial NAV)	Expenses and Interest Paid (% of Initial NAV)	Payment to Class A Reserves	Payment to Class B Reserves	Equity Distributions (% of Initial NAV)
1999	5.00	18	5.00	28	6.00	38	116	9	12	30	10	54
2000	5.00	18	5.00	28	6.00	40	106	10	12	30	10	44
2001	5.00	21	5.00	31	6.00	45	107	10	13	30	10	44
2002	5.00	21	5.00	31	6.00	43	127	10	12	30	10	65
2003	5.00	17	5.00	26	6.50	36	161	9	13	30	10	98
2004	5.00	18	5.50	27	7.00	38	160	11	14	30	10	96
2005	5.00	18	5.50	28	6.50	39	152	11	13	30	10	88
2006	5.00	17	5.00	25	6.00	36	143	11	13	30	10	80
2007	5.00	18	5.00	27	6.00	42	126	12	13	30	10	61
2008	5.00	23	5.00	35	6.00	49	111	12	13	30	10	46
2009	5.00	18	5.00	26	6.00	35	147	10	13	30	10	83
2010	5.00	16	5.00	25	6.00	34	139	10	13	30	10	77
2011	5.00	18	5.00	28	6.00	39	124	11	13	30	10	59
2012	5.00	17	5.00	25	6.00	35	132	12	13	30	10	67
2013	5.00	17	5.00	25	6.00	36	122	12	13	30	10	57
2014	5.00	18	5.00	27	6.50	38	115	12	13	30	10	49
2015	5.00	18	5.00	27	6.50	38	111	12	14	30	10	45

 $Source: Fitch\ Ratings.$ 

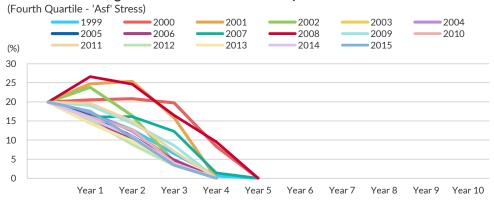
In addition, the disposal option discussed above is a positive qualitative factor to consider, which was not specifically modeled in the scenarios Fitch ran since it is at the discretion of the manager. By exercising the disposal option, the manager may accelerate realization of the NAV on the secondary market but likely at a steep discount in a stressed market.



The charts below show the progression of the LTV ratio over the life of the transaction in different start year scenarios. The 2008 fourth-quartile launch year scenario experienced the highest distributions stress while successfully paying down all classes of bonds. This is primarily driven by weak distributions and a steep decline in valuations imposed on the underlying funds at the onset of the transaction, with recoveries beginning after year 2, after the Global Financial Crisis.

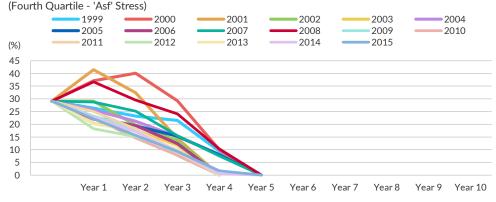
An additional chart below shows the projected annual progression of the transaction under the 2008 launch year scenario.

Class A-1 LTV Progression in Stress Scenarios: by Start Year Scenario



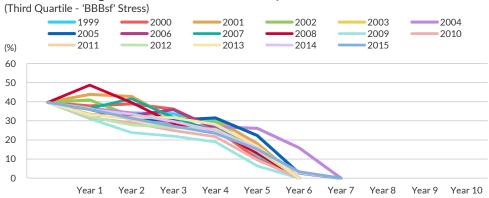
Source: Fitch Ratings.

Class A-2 LTV Progression in Stress Scenarios: by Start Year Scenario



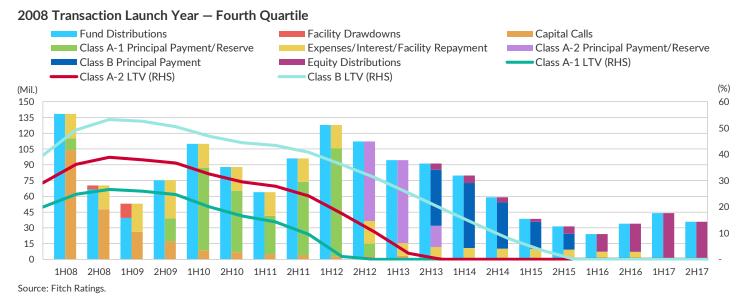
Source: Fitch Ratings.

Class B LTV Progression in Stress Scenarios: by Start Year Scenario



Source: Fitch Ratings.





### **Euro Hedge Stress**

Given the portfolio's exposure to European funds that distribute NAV in euros, Fitch considered the impact of potential FX fluctuation on the structure. As outlined in Fitch's criteria, Fitch's PE CFO cash flow modeling incorporates FX stress scenarios for any unhedged exposure within a portfolio. The scenarios are incorporated into Fitch's base case scenarios and sensitivity analyses, and are based on stress assumptions for currency movements, as outlined in Fitch's "Foreign-Currency Stress Assumptions for Residual Foreign-Exchange Exposures in Covered Bonds and Structured Finance Criteria" report. The FX movements are applied to periodic cash flows, factoring in the PE CFO's hedges. For this rating analysis, the unhedged euro exposure represents approximately USD189 million, or 9.9% of total NAV, and is below the 10% unhedged FX exposure limit in the aforementioned criteria.

#### **Valuations**

PE fund valuations are generally made available quarterly on an unaudited basis and annually on an audited basis. Fund managers apply various valuation methods (discounted cash flow analysis, multiple analysis and so on) to the underlying holdings of the funds. Valuations are made as of a certain date and are reported to the LPs a few months following the valuation reference date. Valuation methods can vary from fund to fund, as managers have discretion on the applied techniques. However, these valuations are prepared in accordance with International Financial Reporting Standards or generally accepted accounting principles in the U.S. or elsewhere.

The initial valuation of Astrea 7 was based on the reported NAVs of the funds as of the latest reported NAV valuation date, Sept. 30, 2021. The NAV valuations for each fund were then adjusted for any capital calls and distributions made between the valuation date and Nov. 30, 2021. Between the NAV valuation date of Sept. 30, 2021 and May 2022, markets have exhibited volatility and the transaction's NAV may have depreciated. Fitch assessed the potential depreciation in the value of the portfolio using public market valuations as a proxy, as described in Fitch's criteria report. Taking into account projected valuation declines to date, as well as actual distributions and capital calls for the funds in the portfolio, cash build up in the transaction accounts and the expected payments to the reserves of class A bonds, Fitch expects that LTVs at the first distribution date will remain in line with the initial LTVs, or be slightly lower.

Going forward, the valuation of the structure's NAV will be made at each determination date based on the most recent audited or unaudited NAVs provided by the underlying GPs. The valuations provided by each GP will be adjusted for any distributions (subtracted from NAV) and capital calls (added to NAV) made between the reference date of the GP's valuation and the distribution date of the structure. Recording the NAVs of the underlying funds, and then building those into the overall PE CFO NAV is the responsibility of the transaction manager. The



structure's NAV will be reconciled to the underlying funds' capital accounts during the annual audit of the structure.

# **Liquidity Analysis**

Fitch-reviewed liquidity coverage levels remained adequate and in line with those of some previous transactions at launch. The liquidity analysis was created using actual cash flows provided by the sponsor for the underlying portfolio from 1Q21 to 1Q22. The scenario assumes a full interest expense liability for the prospective note ratings.

Astrea 7's liquidity position is adequate, although lower than current liquidity positions for other Fitch-rated PE CFOs, driven by the younger profile of the portfolio. Fitch expects the transaction's liquidity position to improve going forward as distributions increase and capital calls decrease due to the seasoning of the portfolio.

# Astrea 7's Estimated One-Year Liquidity Profile

Item/Calculation	Item Description	Amount (USD Mil., Unless Specified Otherwise)
A	Portfolio distributions over one-year period ended March 2022	404
В	Liquidity facility part "A"	130
С	Liquidity facility part "B"	125
D = A+B+C	Total liquidity sources	659
E	Portfolio capital calls over one-year period ended March 2022	181
F	Transaction pro forma fees and expenses for first year	10
G	Transaction pro forma bond interest for first year	37
H = E+F+G	Total liquidity needs	228
I = A-E	Portfolio net cash flow	223
J = A/E	Portfolio liquidity coverage (x)	2.2
K = D-H	Transaction net liquidity	430
L = D/H	Transaction liquidity coverage (x)	2.9

Fitch analyzed the sensitivity of Astrea 7's transaction liquidity coverage (item L in the preceding table) by increasing and decreasing the transaction's capital calls and distributions over the latest 12-month period. The results show that the transaction liquidity coverage remained sufficiently resilient under stress scenarios. As previously noted, Fitch expects capital calls to decrease and distributions to increase, due to portfolio seasoning following the transaction's launch.

п	iaı	uidity	San	citiv	/itv/	Ana	lveie
- L	.ıuı	JIUILV	Sei	ISILIV	/ILV	Alla	IV515

/A = = £ N 4 = = =   - 0.4	2022)					Dist	ributions					
(As of March 31,	2022) —	-75%	-50%	-25%	-10%	-5%	0%	5%	10%	25%	50%	75%
	75%	1.0	1.3	1.5	1.7	1.8	1.8	1.9	1.9	2.1	2.4	2.6
	50%	1.1	1.4	1.7	1.9	2.0	2.1	2.1	2.2	2.4	2.7	3.0
	25%	1.3	1.7	2.0	2.3	2.3	2.4	2.5	2.6	2.8	3.1	3.5
	10%	1.4	1.9	2.3	2.5	2.6	2.7	2.8	2.8	3.1	3.5	3.9
	5%	1.5	1.9	2.3	2.6	2.7	2.8	2.9	2.9	3.2	3.6	4.0
Capital Calls	0%	1.6	2.0	2.4	2.7	2.8	2.9	3.0	3.1	3.3	3.8	4.2
	-5%	1.6	2.1	2.5	2.8	2.9	3.0	3.1	3.2	3.5	3.9	4.4
	-10%	1.7	2.2	2.7	2.9	3.0	3.1	3.2	3.3	3.6	4.1	4.6
	-25%	1.9	2.5	3.0	3.4	3.5	3.6	3.7	3.8	4.1	4.7	5.3
	-50%	2.6	3.3	4.0	4.5	4.6	4.8	4.9	5.1	5.5	6.2	7.0
	-75%	3.8	4.9	6.0	6.7	6.9	7.1	7.3	7.5	8.2	9.3	10.4
Source: Fitch Rating	gs, Astrea 7.											



# The Manager

Fitch considers Azalea suitably qualified, competent and capable of executing its transaction functions as the investment manager of Astrea 7.

Azalea's management team has extensive experience and institutional knowledge in the PE sector, and it draws on and benefits from its connection with Temasek. Temasek and its affiliates have been investing in PE funds for over two decades and remain active in this space. Additionally, Temasek and its affiliates have successfully launched a number of prior Astrea vehicles. However, Temasek and its affiliates are not providing financial support to the bonds or the transaction. As of Dec. 31, 2021, Azalea had total assets under management (AUM) of USD9 billion.

The investment manager will manage the fund investments, administer key fund matters, supervise the administration of assets and bonds, make drawdowns from the credit facility as needed, manage cash flows in accordance with the priority of payments, manage investor relations and reporting to stakeholders, hedge non-USD assets and obligations, and perform various other administration and management services with respect to the AssetCo and the issuer.

The manager has entered into a management agreement with the issuer and will receive a 18.75-bp management fee for performing such services, distributed semiannually per clause (3) of the priority of payments.

Either the issuer or the AssetCo can terminate the services of Azalea as manager for a termination event as specified in the management agreement, such as breach of duty or bankruptcy. Absent the occurrence of a specific termination event, either the issuer or the AssetCo can terminate the manager with 90 days' written notice. Upon any termination of Azalea from the role of manager, the issuer and AssetCo will use commercially reasonable efforts to appoint a substitute manager that agrees to perform the requisite duties and whose appointment would not result in a downgrade to the then-prevailing rating of the most senior class of bonds. Upon receipt of termination notice, the manager will use commercially reasonable efforts to assist the issuer and AssetCo in the appointment of a substitute.

Alternatively, Azalea may choose to resign from the role of manager by providing 90 days' written notice; however, the resignation will not be effective until a replacement that will not result in a downgrade to the then-prevailing rating of the most senior class of bonds is found. In the event the AssetCo does not appoint a substitute within 90 days of the resignation date, Azalea may select as substitute an entity willing to perform the requisite duties and whose selection will not result in a downgrade of the then-prevailing rating of the most senior class of bonds. Fitch believes these terms provide a sufficient procedural framework to find a suitable manager in the unlikely event it should become necessary.

# **Alignment of Interests**

Astrea Capital 7 will hold all the equity interests in Astrea 7 as of the settlement date, and intends to maintain its equity position. As the owner of the equity, the sponsor will bear any losses of the structure prior to bondholders, providing for the alignment of interests. The sponsor is allowed to sell the equity position, but this is not currently expected.

# **Security and Bankruptcy Remoteness**

Bondholders, credit facility and hedge counterparties are secured by:

- a first fixed charge by the issuer over its shares in the AssetCo and the dividends in respect of those shares;
- a first fixed charge by the issuer over its bank accounts and custody accounts;
- an assignment of the issuer's rights under the shareholder loan agreements between the issuer and the AssetCo, respectively; and
- a first floating charge by the issuer of its undertaking and all its assets.

Legal opinions that Fitch reviewed indicate that the issuer is bankruptcy remote, that its assets are unlikely to be consolidated with those of the sponsor and that the transfer of the fund investments under the purchase agreements would be characterized as a sale of rights over the



fund investments and would not be regarded as property of the seller in the event of the seller's insolvency.

## The Model

Fitch performed the cash flow analysis of the structure using a model to forecast hypothetical portfolio cash flows using historical PE data. PE data were sourced from a third-party data provider and covered all quartiles of funds with vintages ranging from 1990 to 2020. The dataset encompassed buyout and growth to parallel the underlying breakdown of the Astrea 7 portfolio. The major data points driving the analysis include historical capital calls, historical distributions, and historical NAV appreciation and depreciation. The historical data within each dataset were extrapolated to simulate the average historical cash flow of a representative PE fund. The historical cash flows were built up, as described in the Cash Flow Scenario Analysis section, to forecast the cash flows of Astrea 7's portfolio of PE holdings.

The model applied the cash flows, as described above, to the priority of payments (see Appendix sections) to simulate the performance of the transaction.

Additionally, the model allowed hypothetical launch dates for the transaction to forecast performance if Astrea 7 was launched during various market cycles. This analysis used observed historical cash flows where available and applied these to the underlying portfolio based on the PE fund age and strategy profile of Astrea 7's holdings. This model provided the ability to run the analyses described in the Cash Flow Scenario Analysis section.

Fitch reviewed each underlying fund to determine the most appropriate asset class mapping relative to the sponsor-provided classification and the third-party cash flow dataset. Fitch mapped each fund to the most relevant strategy to align with the performance cohorts that drive Fitch's modeling using historical cash flows and information provided by the sponsor and other third parties. In all cases, Fitch's strategy classifications aligned with those of the sponsor or third parties. Furthermore, Fitch did not find instances where there was insufficient data to appropriately map them to relevant historical proxy data, and therefore, Fitch did not apply haircuts to the NAV and unfunded commitments of underlying funds in its base case cash flow analysis.

## Surveillance of Transaction

Fitch relied on information on the underlying funds for its analysis and will continue to do so for the ongoing surveillance of Astrea 7. Fitch will also receive monthly and semiannual reporting from the issuer on an ongoing basis through the life of the transaction, which will include cash flows (distributions, capital calls and so on) and valuations for the underlying portfolio, LTV calculations and other information on the transaction's financial profile.

# **Rating Sensitivities**

Factors that could, individually or collectively, lead to negative rating actions include:

- Ratings of the bonds may be downgraded if cash flows materialize at levels lower than
  modeled in Fitch's stress scenarios. A material decline in NAV that, in Fitch's view, would
  indicate insufficient forthcoming cash distributions to support the bonds could also lead
  to rating downgrades.
- Ratings of class A-1 and A-2 bonds may be downgraded if they fail Fitch's 'Asf' modeling scenarios on a sustained basis.
- The rating of class B bonds may be downgraded if it fails Fitch's 'BBBsf' modeling scenarios on a sustained basis.
- A ratings downgrade of a counterparty may also materially affect the ratings of the bonds given the reliance of the issuer on counterparties to provide functions, including providers of the credit facility and bank accounts.
- Fitch relied in its analysis on the legal documentation and opinions for the transaction. If
  any relevant party to the transaction does not follow its responsibilities and procedures
  as described in the documentation, the ratings on the bonds may be affected.



 Ratings of class A-1, A-2 and B bonds may be downgraded if the ratings of any of the eligible investments in the reserves accounts are downgraded below 'A+', 'A' and 'BBB+', respectively, absent mitigating factors.

# Factors that could, individually or collectively, lead to positive rating actions include:

- Fitch has an 'A+' rating cap for PE CFOs. Therefore, positive rating sensitivities are not applicable for class A-1 bonds.
- The rating of class A-2 bonds may be upgraded if it continues to pass Fitch's 'Asf' modeling scenarios, with sufficient cushion, and the LTV decreases materially.
- The rating of class B bonds may be upgraded if it passes Fitch's 'Asf' modeling scenarios, with sufficient cushion, and the LTV decreases materially.

# **Rating Assumptions Sensitivities**

Fitch runs a range of sensitivity analyses on key input parameters to examine the rating stability of each rated bond. The objective of this stress testing is not to eliminate rating migration through unrealistically conservative assumptions but, rather, to test the rating impact of changes in input parameters.

Fitch reviewed the impact on the rating for the following sensitivities.

- Rating sensitivity to NAV: Portfolio NAV immediately reduced by 10%, 20% and 30%.
- Rating sensitivity to fund distributions: Portfolio-level fund distributions reduced by 5%, 10% and 15% in each period. For purposes of calculating the ending-period NAV for each period, the full modeled distributions will be taken into account before reducing the cash flow generated by the percentages listed above.
- Rating sensitivity to fund capital calls: Portfolio-level fund capital calls increased by 10%, 20% and 30%.

The table below shows the modeling results under the base case scenarios (the initial rating scenarios) and under the various sensitivities. The modeling results are generated at the rating category level (i.e. Asf, not A+sf), and the final rating may be adjusted up or down from the modelimplied rating based on other qualitative factors as described in the rating criteria.

# Rating Assumption Sensitivity - Model Implied Results

	Class A-1	Class A-2	Class B
Base Case	Asf	Asf	BBBsf
NAV - 10% Haircut	Asf	Asf	BBBsf
NAV - 20% Haircut	Asf	BBBsf	BBBsf
NAV - 30% Haircut	Asf	BBBsf	BBBsf
Distribution - 5% Haircut	Asf	Asf	BBBsf
Distribution - 10% Haircut	Asf	Asf	BBBsf
Distribution - 15% Haircut	Asf	Asf	BBBsf
Capital Call - 10% Increase	Asf	Asf	BBBsf
Capital Call - 20% Increase	Asf	Asf	BBBsf
Capital Call - 30% Increase	Asf	Asf	BBBsf

Fitch's analysis showed the 20% and 30% NAV haircuts to be the most punitive sensitivity assumptions for the transaction, with class A-2 bonds failing one and four of 17 fourth-quartile scenarios under those sensitivity assumptions, respectively.

Source: Fitch Ratings.



# **Criteria Application and Data Adequacy**

## **Criteria Application**

Fitch applies the "Private Equity Collateralized Fund Obligations (PE CFO) Rating Criteria" as its sector-specific criteria under the overarching framework provided by the "Global Structured Finance Rating Criteria," which is the master criteria for the sector. The "Structured Finance and Covered Bonds Counterparty Rating Criteria" and the "Structured Finance and Covered Bonds Counterparty Rating Criteria: Derivative Addendum" outline Fitch's approach to counterparty risk that is relevant for the ratings. The "Covered Bonds Rating Criteria" and "Fitch's Foreign-Currency Stress Assumptions for Residual Foreign-Exchange Exposures in Covered Bonds and Structured Finance - Supplementary Data File" provide the framework for Fitch's analysis of the foreign-currency exposure for the ratings.

## **Data Adequacy**

As the timing and size of the cash flows is uncertain, Fitch used historical PE fund performance data from a well-known third-party data provider, which cover all performance quartiles of buyout, mezzanine, energy, secondaries, growth, venture, special situations, real estate, natural resources and debt with vintages ranging from 1990 to 2020 to model expected distributions, capital calls and NAVs of the PE funds.



# **Appendix 1: Portfolio Composition**

# Astrea 7 Portfolio

(As of Nov. 30, 2021)

No.	Funds	Vintage	Geography	Strategy	Commit- ment (USD Mil.)	NAV (USD Mil.)	% of NAV	Undrawn Capital Commitments (USD Mil.)	Total Exposure (USD Mil.)	
1	A9 EUR Feeder L.P.	2016	Europe	Buvout	33.8	60.2	3.2	4.7	64.9	3.0
2	Advent International GPE IX-G Limited Partnership	2019	North America	Buyout	45.0	66.3	3.5	19.7	86.0	4.0
3	Bain Capital Fund XII, L.P.	2017	North America	Buyout	45.0	49.8	2.6	8.2		2.7
4	BC European Capital X-3 LP	2017	Europe	Buyout	33.8	48.4	2.5	1.7	50.1	2.3
5	Blackstone Capital Partners VII L.P.	2016	North America	Buyout	40.0	50.4	2.6	3.4	53.8	2.5
6	Bridgepoint Europe V A1 LP	2015	Europe	Buyout	28.2	28.8	1.5	2.3	31.1	1.4
7	Carlyle Partners VII, L.P.	2018	North America	Buyout	50.0	51.7	2.7	3.1	54.8	2.5
8	Cevine Capital Management VI No.1 Feeder LP Inc.	2016	Europe	Buyout	28.1	37.5	2.0	2.9	40.4	1.9
9	CPEChina Fund III, L.P.	2018	Asia	Buyout	40.0	49.4	2.6	1.2	50.6	2.3
10	CVC Capital Partners VI B L.P.	2014	Europe	Buyout	28.1	30.1	1.6	4.1	34.2	1.6
11	CVC Capital Partners VII A L.P.	2017	Europe	Buyout	45.0	43.2	2.3	16.1	59.3	2.8
12	EQT Mid Market Europe No.1 Feeder LP	2017	Europe	Buyout	56.3	59.0	3.1	16.5	75.5	3.5
13	EQT VII No.1 Limited Partnership	2015	Europe	Buyout	39.4	34.5	1.8	4.1	38.6	1.8
14	General Atlantic, L.P.	2015	North America	Growth	30.0	63.5	3.3	0.9	64.4	3.0
15	Insight Venture Partners Cayman X, L.P.	2017	North America	Growth	25.0	62.4	3.3	1.1	63.5	2.8
16	KKR Americas Fund XII L.P.	2017	North America	Buyout	40.0	60.7	3.2	7.7	68.4	3.2
17	KKR Asian Fund III L.P.	2017	Asia	Buyout	50.0	65.6	3.4	12.0	77.6	3.6
18	L Catterton VIII Offshore, L.P.	2017	North America	Buyout	40.0	34.7	1.8	14.1	48.8	2.3
19	Nordic Capital IX Alpha, L.P.	2018	Europe	Buyout	33.8	57.6	3.0	5.8	63.4	2.9
20	PAG Asia III LP	2018	Asia	Buyout	42.5	25.7	1.4	15.0	40.7	1.9
21	Permira V L.P.1	2014	Europe	Buyout	48.4	79.7	4.2	2.3	82.0	3.8
22	Permira VI L.P.1	2016	Europe	Buyout	28.1	44.3	2.3	6.3	50.6	2.4
23	Providence Equity Partners VIII-A L.P.	2018	North America	Buyout	50.0	37.9	2.0	20.4	58.3	2.7
24	Silver Lake Partners V, L.P.	2018	North America	Buyout	35.0	52.3	2.7	5.6	57.9	2.7
25	TA XII-B, L.P.	2016	North America	Growth	35.0	48.2	2.6	0.3	48.5	2.3
26	The Veritas Capital Fund VI, L.P.	2017	North America	Buyout	20.0	59.2	3.1	2.0	61.2	2.8
27	Thoma Bravo Fund XII-A, L.P.	2016	North America	Buyout	30.0	51.0	2.7	6.2	57.2	2.7
28	Thoma Bravo Fund XIII-A, L.P.	2018	North America	Buyout	40.0	57.0	3.0	8.1	65.1	3.0
29	TPG Asia VII B, L.P.	2018	Asia	Buyout	45.0	47.6	2.5	13.8	61.4	2.8
30	TPG Partners VII, L.P.	2015	North America	Buyout	45.0	34.7	1.8	8.2	42.9	2.0
31	Trustbridge Partners VI, L.P.	2017	Asia	Growth	30.0	44.2	2.3	0.2	44.4	2.1
32	Vista Equity Partners Fund VI-A, L.P.	2016	North America	Buyout	35.0	53.3	2.8	6.8	60.1	2.8
33	Vista Equity Partners Fund VII-A, L.P.	2018	North America	Buyout	50.0	45.7	2.4	13.5	59.2	2.8
34	Warburg Pincus China, LP.	2016	Asia	Growth	35.0	47.7	2.5	1.1	48.8	2.3
35	Warburg Pincus Global Growth, L.P.	2019	North America	Growth	50.0	49.7	2.6	9.0	58.7	2.7
36	Warburg Pincus Private Equity XII, L.P.	2015	North America	Growth	45.0	65.6	3.4	0.6	66.2	3.1
37	Welsh, Carson, Anderson and Stowe XII, L.P.	2015	North America	Buyout	40.0	52.9	2.8	1.1	54.0	2.5
38	Yunfeng Fund III, L.P.	2018	Asia	Growth	45.0	54.3	2.9	0.3	54.6	2.5
Tot	al - Astrea 7 Portfolio				1,480.5	1,904.8	100.0	250.4	2,155.2	100.0

Source: Astrea 7 Pte. Ltd.



# **Appendix 2: Terms of Bonds**

## **Priority of Payments**

Unless and until an enforcement event occurs, the payments to be made on each distribution date from the available cash flow (defined below) of the issuer as of the distribution reference date relating to such distribution date shall be made in the following order of priority:

- 1. Payment of taxes (if any) of the issuer and the asset-owning companies and expenses (other than those provided for in clauses 2 through 13 of the priority of payments) up to an aggregate cap of USD0.9 million per distribution period (which will be proportionately adjusted for a distribution period that is longer or shorter than six months, the "clause 1 cap").
- 2. Payment of amounts due and payable to the hedge counterparty under any hedge agreement in respect of swap transactions entered into by the issuer (save for the amounts payable under clause 12).
- 3. Manager fees.
- 4. Payment for the following uses relating to the credit facility agreement in the following order:
  - a. credit facility commitment fees;
  - b. credit facility interest expense and any other payables; and
  - c. credit facility principal repayment.
- 5. Class A-1 and A-2 bond interest expense on a pari passu and pro-rata basis.
- 6. Class B bond interest expense.
- 7. If net cash proceeds are received from sale or disposal of fund investments pursuant to the exercise of the disposal option, payment of 100% of cash flow remaining after clauses 1 through 6:
  - a. so long as any class A-1 bond is outstanding, to class A reserves accounts until the class A reserves accounts cap has been met and, thereafter, to class B reserves accounts until the class B reserves accounts cap has been met (regardless of whether class A-1 or A-2 bonds have been redeemed); or
  - b. upon and after full redemption of all class A-1 bonds, to the repayment of the outstanding principal amount of class A-2 bonds and, thereafter, to class B reserves accounts until the class B reserves accounts cap has been met.

In either case, until the amount so paid under this clause 7 is equal to (but not exceeding) the total amount of net cash proceeds so received.

8. Payment for the following uses in the following order:

So long as any class A-1 Bond is outstanding:

Payment to class A reserves accounts for the following uses in the following order:

- a. payment for the amount of any losses realized on investments held in class A reserves custody account until such losses have been recouped;
- b. payment for the unpaid reserve amount applicable to such distribution date; and
- c. payment for the reserve amount applicable to such distribution date.

Upon and after full redemption of all class A-1 bonds:

- a. payment of the amount available under this clause 8 to the principal repayment of class A-2 bonds.
- 9. Upon and after full redemption of all class A bonds, payment of 90% of cash flow remaining after clauses 1 through 8 to class B reserves accounts until the class B reserves accounts cap has been met.
- 10. If the maximum LTV ratio has been exceeded, payment of 100% of cash flow remaining after clauses 1 through 9:



- so long as any class A-1 bond is outstanding, to the class A reserves accounts until the class A reserves accounts cap has been met and, thereafter, to class B reserves accounts until the class B reserves accounts cap has been met (regardless of whether class A-1 or A-2 bonds have been redeemed); or
- c. upon and after full redemption of all class A-1 bonds, to the repayment of the outstanding principal amount of class A-2 bonds and, thereafter, to class B reserves accounts until the class B reserves accounts cap has been met.

In either case, until the maximum LTV ratio is no longer exceeded.

- 11. Administrative expenses in excess of the clause 1 cap and any other expenses.
- 12. Payment of amounts due and payable to any hedge counterparty under any hedge agreement in respect of the early termination of swap transactions entered into by the issuer where such early termination is due to an event of default with respect to which such hedge counterparty is the defaulting party (as defined in such hedge agreement) or a termination event (as defined in such hedge agreement) with respect to which such hedge counterparty is the affected party (as defined in such hedge agreement).
- 13. Payment of 100% of the cash flow remaining after clauses 1 through 12 of the priority of payments to the equity investor(s).

#### Provided always that:

- a. all capital calls will be paid first from the total cash balance in the operating accounts when due (even if such due date falls on a distribution date);
- b. for any taxes or administrative expenses of any of the issuer and the asset-owning companies due on any date that is not a distribution date, such taxes or expenses will be paid from the total cash balance in the operating accounts when due. The amount of such payments will, on the next distribution date, be included in the calculation for determining whether the clause 1 cap has been met;
- c. for any interest or principal repayment due on any loan made under the credit facility agreement (each a CF loan) on a date that is not a distribution date, such interest or principal repayment will be paid from the total cash balance in the operating accounts when due; and
- d. for any payment due on any swap transaction under clause 2 above on any date that is not a distribution date, such payment will be paid from the total cash balance in the operating accounts.

In relation to each distribution reference date, available cash flow is defined as the total cash balance in the operating accounts as of such distribution reference date less the retained amount. For the avoidance of doubt, the total cash balance in the operating accounts includes, without limitation:

- a. any amounts transferred from the collection accounts;
- interest income and realized gains received from the reserves accounts and the reserves custody accounts;
- c. cash balance (if any), and the net proceeds realized from disposing all assets then held, in the operating custody accounts;
- d. proceeds of any CF loans;
- e. any retained amount and additional retained amount from the preceding distribution period;
- f. proceeds of any equity investments; and
- g. the transfer of the residual balance from the settlement accounts (after the bond proceeds have been used for (a) repaying a certain portion of equity investor(s) shareholder loan(s) incurred in connection with the asset-owning companies' acquisition of the fund investments and (b) payment of fees and expenses incurred in connection with the issue and offering of the bonds.



#### Post-Enforcement Priority of Payments

If an event of default has occurred and the bonds have been accelerated (together, an enforcement event), all cash in the collection accounts will be swept to the operating accounts (via a daily cash flow sweep) and all available funds in the operating accounts, reserves accounts, and settlement accounts (except for amounts set aside for repaying a certain portion of the existing shareholder loan[s] from the equity investor(s) incurred in connection with the acquisition of fund investments and payment of fees and expenses incurred in connection with the issue and offering of the bonds) will be applied according to the following post-enforcement priority of payments:

- Payment of amounts due under clause 1 of the priority of payments. With regard to amounts due for payments of administrative expenses under clause 1 of the priority of payments, only those amounts required for enforcement of the security or the bonds will be paid under this clause 1. The amounts paid under this clause 1 will be paid without regard to any caps.
- Payment of any amounts due and outstanding to the hedge counterparty under any hedge agreement in respect of swap transactions entered into by the issuer (save for the amounts payable under clause 10 below).
- 3. Payment for the following uses relating to the credit facility agreement in the following order:
  - a. credit facility commitment fees;
  - b. credit facility interest expense and any other payables; and
  - c. credit facility principal repayment.
- 4. Payment of accrued and unpaid interest on class A-1 and A-2 bonds on a pari passu and prorata basis.
- 5. Repayment of outstanding principal amount (and, if applicable, premium) of class A-1 and A-2 bonds on a pari passu and pro-rata basis.
- 6. Payment of accrued and unpaid interest on class B bonds.
- 7. Repayment of outstanding principal amount of class B bonds.
- 8. Payment of any unpaid administrative expenses or any other expenses not included in clause 1 above.
- 9. Payment of any capital calls.
- 10. Payment of amounts due and payable to any hedge counterparty under any hedge agreement in respect of the early termination of swap transactions entered into by the issuer where such early termination is due to an event of default with respect to which such hedge counterparty is the defaulting party (as defined in such hedge agreement) or a termination event (as defined in such hedge agreement) with respect to which such hedge counterparty is the affected party (as defined in such hedge agreement).
- 11. Payment to equity investor(s).



#### Disclaimer

Fitch relies in its credit analysis on legal and/or tax opinions provided by transaction counsel for the avoidance of doubt. Fitch has always made clear that it does not provide legal and/or tax advice or confirm that the legal and/or tax opinions, or any other transaction documents, or any transaction structures, are sufficient for any purpose. The disclaimer at the foot of this report makes it clear that this report does not constitute legal, tax and/or structuring advice from Fitch, and should not be used or interpreted as legal, tax and/or structuring advice from Fitch. Should readers of this report need legal, tax and/or structuring advice, they are urged to contact relevant advisers in the relevant jurisdictions.

The ratings above were unsolicited and have been provided by Fitch as a service to investors.

#### **DISCLAIMER & DISCLOSURES**

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by following this link: https://www.fitchratings.com/understandingcreditratings. In addition, the following https://www.fitchratings.com/rating-definitions-document details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, criteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at https://www.fitchratings.com/site/regulatory. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA- or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters.  $Further, ratings \ and \ for exacts \ of financial \ and \ other \ information \ are \ inherently \ forward-looking \ and \ embody \ assumptions \ and \ predictions \ about$ future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the taxexempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and under writers for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue.In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The ssignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see https://www.fitchratings.com/site/regulatory), other credit rating subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

Copyright © 2022 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved.